CLAIMS

[001] A circuit configuration for the transmission of data signals from and/or to household appliances between a first transceiver device and a second transceiver device via an AC power supply line system within a transmission frequency range which lies above the frequency of the AC power supply, wherein the respective transceiver is connected to a filter arrangement at the AC power supply line system, characterized in that the respective filter arrangement (FI) containing a power supply low-pass filter (FI) which is arranged in the input circuit of the power supply unit (PS) of the associated transceiver device (MO) and is provided with an impedance curve such that the impedance (Zfi) thereof in said transmission frequency range has a value that is at least twice as high as the impedance (Zn) of the AC power supply line system (PL) in said transmission frequency range.

[002] The circuit configuration according to claim 1, characterized in that in an AC power supply line system (PL) comprising at least one current-carrying line conductor (LN) and an ground conductor (NO), the power supply low-pass filter (FI) consists of an inductive component (L) located in the respective line conductor (NL) and a capacitor arrangement (C1; C2; C3) located between at least one end of the relevant inductive component (L) and the ground conductor (NO).

[003] The circuit configuration according to claim 2, characterized in that the capacitor arrangement (C1; C2, C3) consists of a single capacitor (X capacitor) (C1) which connects the end of the inductive component (L) on the power supply unit side to the ground conductor (NO) of the AC power supply line system (PL) and a series circuit of two

capacitors (Y capacitors) (C2, C3) connected in parallel to this single capacitor (C1), whose common connection point is connected to the ground connection of the relevant power supply unit (PS).

[004] The circuit configuration according to claim 2 or claim 3, characterized in that an ohmic resistor (R) is connected in parallel to the capacitor arrangement (C1; C2; C3).

[005] The circuit configuration according to any one of claims 2 to 4, characterized in that respectively one winding (W1; W2) of a current-compensated choke (DR) is inserted in the conductor sections of the power supply low pass filter (FI) connected to the respective line conductor (NL) and the ground conductor (NO) of the AC power supply line system (PL).

NEW CLAIMS

1. A circuit configuration for the transmission of data signals from and/or to household appliances between a first transceiver device and a second transceiver device via an AC power supply line system within a transmission frequency range which lies above the frequency of the AC power supply, wherein the respective transceiver contains a power supply unit whose input circuit is connected to the AC power supply line system via a power supply low pass filter, characterized in that the power supply low-pass filter (FI) which is arranged in the input circuit of the power supply unit (PS) is provided with an impedance curve such that the impedance (Zfi) thereof in said transmission frequency range has a value that is at least twice as high as the impedance (Zn) of the AC power supply line system (PL) in said transmission frequency range.

2. The circuit configuration according to claim 1, characterized in that in an AC power supply line system (PL) comprising at least one current-carrying line conductor (LN) and an ground conductor (NO), the power supply low-pass filter (FI) consists of an inductive component (L) located in the respective line conductor (NL) and a capacitor arrangement (C1; C2; C3) located between at least one end of the relevant inductive component (L) and the ground conductor (NO).

3. The circuit configuration according to claim 2, characterized in that the capacitor arrangement (C1; C2, C3) consists of a single capacitor (X capacitor) (C1) which connects the end of the inductive component (L) on the power supply unit side to the ground conductor (NO) of the AC power supply line system (PL) and a series circuit of two

capacitors (Y capacitors) ((C2, C3) connected directly in parallel to this single capacitor (C1), whose common connection point is connected to the ground connection of the relevant power supply unit (PS).

4. The circuit configuration according to claim 2 or claim 3, characterized in that an ohmic resistor (R) is connected in parallel to the capacitor arrangement (C1; C2; C3).

5. The circuit configuration according to any one of claims 2 to 4, characterized in that respectively one winding (W1; W2) of a current-compensated choke (DR) is inserted in the conductor sections of the power supply low pass filter (FI) connected to the respective line conductor (NL) and the ground conductor (NO) of the AC power supply line system (PL).